- 19. UTM c. 762213. Valley of No Wind between White Hill/Horse and Little White Hill: 23 July 1962, booby skeletons including skull *Sula dactylatra*.
- 20. UTM c. 766215. Cairn in saddle, ravine to west of Letterbox. 1990: 2 recent Gygis alba.
- 21. UTM 714265. Porpoise Point. 1990: two mandibles and other bones *Sula sula*, humerus and distal tibia *S. leucogaster*.
- 22. UTM 655251. Opposite Stack I, various dates 1962-63, 1990: active cat larders with remains *of Sula leucogaster*. 1996: metacarpals and feathers of *Anous stolidus*, which also still breeds on these stacks, near Stack 5.

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Sylvia is a babbler: taxonomic implications for the families Sylviidae and Timaliidae

by Alice Cibois

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Molecular analyses have played an important role in the progress of the systematics of birds in general, and of passerines in particular. Sibley & Ahlquist's (1990) milestone book synthesized a decade of work on avian phylogeny based on molecular characters. Several ornithologists have subsequently followed the classification proposed by Sibley & Monroe (1990), prematurely according to others (Mayr & Bock 1994). Numerous molecular studies have recently been conducted on avian taxa, some agreeing with Sibley's results, and disagreeing in others (e.g. Barker *et al.* 2002). In this context, particular attention has been placed on the Old World warbler group (Sylviidae), and especially on the genus *Sylvia*. Large amount of evidence suggests that this taxon is more closely related to the babblers (Timaliidae) than to the other warblers. After reviewing the molecular studies involved, this article weighs the evidence and discusses the ramifications for nomenclature.

The evidence

Sibley & Alhquist (1990) suggested, on the basis of DNA hybridization results, that *Sylvia* is more closely related to babblers than to the other warblers. In the global tree extracted from the DNA hybridization distance matrices (Fig. 381 p. 866), four species of *Sylvia* (Garden Warbler *S. borin*, Blackcap *S. atricapilla*, Lesser Whitethroat *S. curruca* and Orphean Warbler *S. hortensis*) cluster together and are embedded within the babblers. The Wrentit *Chamaea fasciata* is the babbler closest to the *Sylvia* group. Sibley's analysis also included the Southern Tit Warbler *subcaeruleum*, formerly in *Parisoma*, and the results suggest that this species is in fact a *Sylvia* (Fig. 286 p.796). Consequently *Parisoma* was merged into *Sylvia* in

Monroe & Sibley's (1993) checklist. Blondel *et al.* (1996) also studied the genus *Sylvia* using DNA hybridization, and similarly concluded that species previously placed in *Parisoma* form a monophyletic group with the *Sylvia* species. Sheldon & Gill (1996) attempted to replicate a portion of Sibley & Ahlquist's (1990) phylogenetic tree for oscine passerines, using the same methodology and sampling fewer taxa. Their results differed for some parts of the topology, but supported a close relationship between *Sylvia* and the babbler genus *Stachyris* (Figures 5 and 7, pp. 482 and 484).

The phylogenetic affinities between Sylvia and babblers were further demonstrated by mitochondrial and nuclear DNA sequencing. Fjeldså et al. (1999), reviewing molecular evidence for the relationships of Malagasy birds, included new mitochondrial sequence data for a subgroup of oscine birds, initially focussing on Phyllastrephus (Pycnonotidae), but including also representatives of warblers and babblers. The topology presented was unresolved at the familial level (Fig. 1, p. 3091), but suggested a close relationship between Sylvia atricapilla and two African babblers of the genus Pseudoalcippe (the Abyssinian Hill Babbler P. atriceps and the Ruwenzori Hill Babbler P. abyssinica). Cibois (2000, 2003) conducted a comprehensive reconstruction of the phylogeny of the babbler family using sequences of three different mitochondrial markers. The results agree with Fjeldså et al. (1999) in finding a sister relationship between Sylvia and Pseudoalcippe, these two taxa being members of a monophyletic group of Asian babblers that also includes the American babbler Chamaea fasciata. Finally, Barker et al. (2002) performed a large phylogenetic analyses of the oscine passerines based on nuclear sequence data, and found that Sylvia, Garrulax and Zosterops belong in the same clade.

Taxonomic implications

Thus evidence has accumulated from different molecular approaches indicating that *Sylvia* (including *Parisoma*) is in fact a babbler. Most of the taxonomic modifications proposed consequently follow Sibley's classification, in which the babbler group is included within the Sylviidae, and divided among two subfamilies, Garrulacinae and Sylviinae, and among three tribes inside the Sylviinae: Timaliini and Chamaeini for the babblers, Sylviini for *Sylvia* (Inskipp *et al.* 1996, Robson 2000). This classification was derived from the results of DNA hybridization but, except for the position of *Sylvia*, there is no confirmation from other studies for the hypotheses of relationship concerning the other babblers. For example, the phylogeny reconstructed by Cibois (2000, 2003) does not feature a subdivision of Garrulacinae *versus* other babblers. Shirihai *et al.* (2001) recently suggested including the babblers and *Sylvia* in a subfamily within the Sylviidae. They proposed naming this subfamily Timaliinae, but without commenting on nomenclatural procedure.

The proposition suggested here is to restrict taxonomic modification only to the case of *Sylvia*, whose phylogenetic relationships are now well supported. This modification would include the placement of *Sylvia sensu lato* (i.e. *Sylvia* and *Parisoma* species) among babblers. The question then becomes, what is the name of this group? To address this matter, I refer to the International Code of Zoological

Nomenclature (International Commission on Zoological Nomenclature 1999) which contains the two following relevant statements:

1. *Principle of priority*. Article 23 states, in summary, that the valid name for a taxon is the oldest available applied to it. Therefore Sylviidae Leach, 1820 (*Sylvia* Scopoli, 1769) has priority with respect to Timaliidae Vigors and Horsfield, 1827 (*Timalia* Horsfield, 1821). In this case, Timaliidae would become a synonym of Sylviidae as a name for the babblers and *Sylvia* assemblage. However, this solution would be very confusing for all the users of the classification, because the name Timaliidae (or Timaliinae) has been consistently used since the beginning of the last century for the taxon including *Timalia* and the other babblers (Hartert 1907, Delacour 1946, Mayr & Amadon 1951, Vaurie 1959, Deignan 1964, Storer 1971, Morony *et al.* 1975, Wolters 1975-1982, Voous 1977, Howard & Moore 1994).

2. Precedence of names in use at family level. Stability of family names is emphasized in two articles of the Code. Article 40.1 states that the validity of family-group names is not affected by the fact that its type genus is considered to be a junior synonym of the name of another nominal genus. Moreover, Article 35.5 states the precedence of names already in use at higher rank, increasing the stability at this level of taxonomy. Thus, the type genus *Sylvia* will always remain the name-bearer of the family-group name Sylviidae, and modification of the status of the type genus should not be followed by modification of the family-group name to which the type genus is related (see Bock (1994) for details on the type genus concept in zoological nomenclature).

The family-name issue between Timaliidae and Sylviidae has been submitted for consideration to the Standing Committee on Ornithological Nomenclature (SCON), which met in August 2002 during the 23rd International Ornithological Congress. The SCON withdrew from taking any action at that stage because, in its view, a sufficient case had not been yet published (Richard Schodde, pers. comm.). Nevertheless, following the SCON's suggestion, the conditional suppression of the Sylviidae with respect to Timaliidae is proposed here. If in the future babblers and warblers are placed by some authors in the same family, then this group should be called Sylviidae as a strict application of the priority rule (cf. statement 1). However, if as seems likely, the Timaliidae and several groups of warblers are recognized at the same family level, then the family-group name Sylviidae Leach, 1820 should be suppressed and the name Timaliidae Vigors and Horsfield, 1827 kept for the babblers and Sylvia. Other names should be used for the different warbler groups, chosen for instance among the 26 synonyms listed for Sylviinae by Bock (1994). Maintaining the name Timaliidae for the group that comprises Sylvia, Timalia and the other babblers is consistent with the phylogenetic results provided by numerous studies, and this proposition follows the principle of stability of scientific names advocated in the code of nomenclature (cf. statement 2). Several molecular studies already suggested that the Old World warbler group, regardless of *Sylvia*, is not monophyletic (Sibley & Ahlquist 1990, Sheldon & Gill 1996, Sturmbauer *et al.* 1998, Cibois *et al.* 1999). Following these results, the emergence of the Cisticolidae Sundevall, 1872 and Regulidae Vigors, 1825 has been acknowledged (Inskipp *et al.* 1996), and additional studies will determine which other warbler groups also deserve to be recognized as families.

In conclusion, it is clear that further studies will be necessary for addressing the complex case of the Old World warbler phylogeny. However, given the flux of family level taxonomy generated by molecular studies, similar cases are likely to arise in the future, and formal propositions for modifications at the family-level should be developed to avoid conflicting use in the literature.

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Notes on the avifauna of the Cordillera de Mérida, Venezuela

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The Andes of Venezuela are oreographically a north-eastern extension of the Cordillera Oriental of Colombia, separated from the latter by the Táchira depression. They extend from Táchira in the south-west to Lara in the north-east but the main range is located within the territory of Mérida (Cordillera de Mérida; Fig. 1). In central Mérida, the mountains rise up to an elevation of 5,000 m a.s.l. (Pico Bólivar, 5,007 m), comprising a large variety of altitudinal landscapes and ranging from the